DOE – Medical and Infectious Disease Update – Wednesday, August 20, 2003

DOE weekly updates on SARS, West Nile Virus, or other illnesses will continue as appropriate or as requested. The following information is current as of Thursday, August 21, 2003, 0800 hours, EDT. Information presented is routinely taken from the Centers for Disease Control and Prevention (CDC), http://www.cdc.gov/, The World Health Organization (WHO), http://www.who.int/en/, the Department of Defense Global Emerging Infections Surveillance and Response System site, (DoD-GEIS)-http://www.geis.ha.osd.mil/, and other creditable sources.

Recent news

Smallpox Vaccine's Protection May Last Decades

Monday, August 18, 2003: **People Inoculated More Than 30 Years Ago May Still Have Immunity to Fatal Virus, Study Finds** - http://www.washingtonpost.com/wp-dyn/articles/A7037-2003Aug17.html *By David Brown,* Washington Post Staff Writer ... Many of the 120 million Americans who were vaccinated against smallpox more than 30 years ago may still have enough immunity against the disease to protect them from fatal infection, should the virus ever be used as a biological weapon ...

The Omega Principle

Tuesday, August 19, 2003: Some Fish Fats Protect the Heart. What If They Could Also Treat Your Brain? - http://www.washingtonpost.com/wp-dyn/articles/A11623-2003Aug18.html

By Sally Squires, Washington Post Staff Writer ... They occur naturally in fish, flaxseed, canola oil, nuts and avocados. They're also extracted, packaged and sold in dozens of dietary supplements. Increasingly, they even show up on grocery shelves as the latest fortification in such popular fare as bread, eggs, dairy products, margarine, baby food and cereal ...

CDC West Nile Virus Home Page - http://www.cdc.gov/ncidod/dvbid/westnile/index.htm Three Ways to Reduce your West Nile Virus Risk:

Avoid Mosquito Bites: Mosquito-Proof Your Home: Help Your Community

CDC West Nile Virus Statistics, Surveillance, and Control

Maps and Data | Surveillance Program | Guidelines | Case Definition | See Also

CDC West Nile Virus Case Count

as of August 20, 2003 3am MDT - http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount03.htm - there were 715 cases and 14 deaths reported from 29 states. This represents an increase of 342 cases and 5 deaths since last Wednesday's case count.

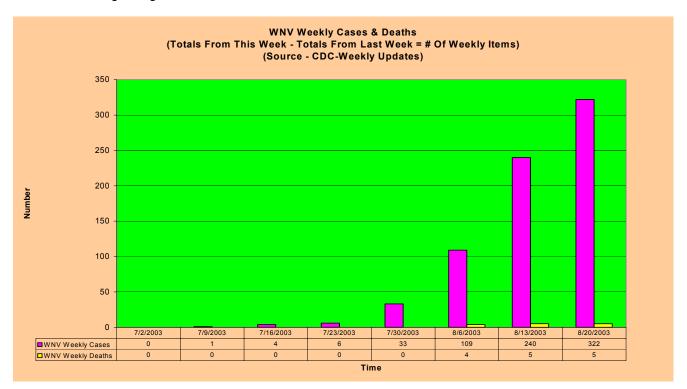
State	Human Cases* Reported to CDC	Deaths
Alabama	11	2
Arkansas	1	
Colorado	263	6
Florida	4	
Georgia	2	
Iowa	9	

Kansas	4	
Kentucky	3	
Louisiana	30	
Maryland	1	
Massachusetts	1	
Minnesota	12	
Mississippi	14	
Missouri	1	
Nebraska	99	3
New Jersey	1	
New Mexico	8	
North Carolina	2	
North Dakota	6	
Ohio	9	1
Oklahoma	3	
Pennsylvania	17	
South Carolina	1	
South Dakota	117	
Tennessee	2	
Texas	70	2
Virginia	2	
Wisconsin	1	
Wyoming	21	
Total	715	14

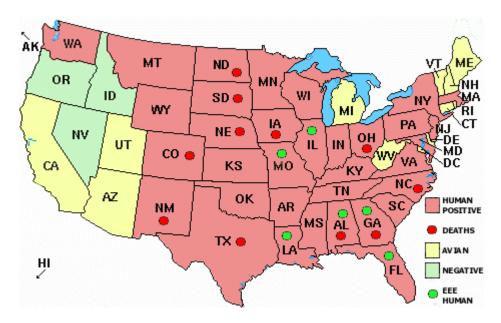
^{*}These numbers reflect both mild and severe human disease cases that have been reported to ArboNet by state and local health departments during 2003. ArboNet is the national, electronic surveillance system established by CDC to assist states in tracking West Nile virus and other mosquito-borne viruses.

As of the above date, detailed information is available for 692 cases: 362 cases (52%) were reported as West Nile Fever (milder disease), 266 (38%) were reported as West Nile meningitis or encephalitis (severe

disease) and 64 (9%) were clinically unspecified. Please refer to <u>state health department websites</u> for further details regarding state case totals.



West Nile Virus Interactive Map - If you go to this site, each State will be 'HOT', and 'left-clicking' on a State will link you to its Health Department's West Nile web site. Where the CDC map and case summery is a lagging indicator, this map, linked to each State's Health Department, provides real-time information for those states which update regularly, such as PA and CO. If the picture below is not 'HOT'! Go to https://www.mosquitoczar.com/west_nile_virus.





U.S. Geological Survey - http://westnilemaps.usgs.gov/

West Nile Virus Maps - 2003



2002 West Nile Maps (CINDI Website)

The following links provide other information on the West Nile Virus:

<u>USGS West Nile Virus Page</u>; <u>USGS National Wildlife Health Center, Madison, Wisconsin</u>; <u>USGS National Biological Information Infrastructure West Nile Virus Page</u>

West Nile Virus: What You Need To Know

CDC Factsheet - http://www.cdc.gov/ncidod/dvbid/westnile/wnv factSheet.htm

What Is West Nile Virus?

West Nile virus (WNV) is a potentially serious illness. Experts believe WNV is established as a seasonal epidemic in North America that flares up in the summer and continues into the fall. This fact sheet contains important information that can help you recognize and prevent West Nile virus.

What Are the Symptoms of WNV?

WNV affects the central nervous system. Symptoms vary.

- **No Symptoms in Most People**. Approximately 80 percent of people who are infected with WNV will not show any symptoms at all.
- Mild Symptoms in Some People. Up to 20 percent of the people who become infected will
 display mild symptoms, including fever, headache, and body aches, nausea, vomiting, and
 sometimes swollen lymph glands or a skin rash on the chest, stomach and back. Symptoms
 typically last a few days.
- Serious Symptoms in a Few People. About one in 150 people infected with WNV will develop severe illness. The severe symptoms can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness and paralysis. These symptoms may last several weeks, and neurological effects may be permanent.

How Does It Spread?

- Infected Mosquitoes. Generally, WNV is spread by the bite of an infected mosquito. Mosquitoes are WNV carriers that become infected when they feed on infected birds. Infected mosquitoes can then spread WNV to humans and other animals when they bite.
- Transfusions, Transplants, and Mother-to-Child. In a very small number of cases, WNV also has spread through blood transfusions, organ transplants, breastfeeding and even during pregnancy from mother to baby.
- Not through touching. WNV is not spread through casual contact such as touching or kissing a person with the virus.

How Soon Do Infected People Get Sick?

People typically develop symptoms between 3 and 14 days after they are bitten by the infected mosquito.

How Is WNV Infection Treated?

There is no specific treatment for WNV infection. In cases with mild symptoms, people experience symptoms such as fever and aches that pass on their own. In more severe cases, people usually need to go to the hospital where they can receive supportive treatment including intravenous fluids, help with breathing and nursing care.

What Should I Do if I Think I Have WNV?

Mild WNV illness improves on its own, and people do not necessarily need to seek medical attention for this infection. If you develop symptoms of severe WNV illness, such as unusually severe headaches or confusion, seek medical attention immediately. Severe WNV illness usually requires hospitalization. Pregnant women and nursing mothers are encouraged to talk to their doctor if they develop symptoms that could be WNV.

What Is the Risk of Catching WNV?

For most, **risk is low**. Less than 1 percent of people who are bitten by mosquitoes develop any symptoms of the disease and relatively few mosquitoes actually carry WNV.

Greater risk for those outdoors a lot. People who spend a lot of time outdoors are more likely to be bitten by an infected mosquito. They should take special care to avoid mosquito bites.

People over 50 can get sicker. People over the age of 50 are more likely to develop serious symptoms of WNV if they do get sick and should take special care to avoid mosquito bites.

Risk through medical procedures is low. The risk of getting WNV through blood transfusions and organ transplants is very small, and should not prevent people who need surgery from having it. If you have concerns, talk to your doctor before surgery.

Pregnancy and nursing do not increase risk of becoming infected with WNV. What Can I Do to Prevent WNV?

The easiest and best way to avoid WNV is to prevent mosquito bites.

- When you are outdoors, use insect repellents containing DEET (N, N-diethyl-meta-toluamide). Follow the directions on the package.
- Many mosquitoes are most active at dusk and dawn. Consider staying indoors during these times or use insect repellent and wear long sleeves and pants. Light-colored clothing can help you see mosquitoes that land on you.
- Make sure you have good screens on your windows and doors to keep mosquitoes out.
- Get rid of mosquito breeding sites by emptying standing water from flower pots, buckets and barrels. Change the water in pet dishes and replace the water in bird baths weekly. Drill drainage holes in tire swings so water drains out. Keep children's wading pools empty and on their sides when they aren't being used.

What Is the CDC Doing About WNV?

CDC is working with state and local health departments, the Food and Drug Administration and other government agencies, as well as private industry, to prepare for and prevent new cases of WNV.

Some things CDC is doing include:

- Coordinating a nation-wide electronic database where states share information about WNV
- Helping states develop and carry out improved mosquito prevention and control programs
- Developing better, faster tests to detect and diagnose WNV
- Creating new education tools and programs for the media, the public, and health professionals
- Opening new testing laboratories for WNV

What Else Should I Know?

If you find a dead bird: Don't handle the body with your bare hands. Contact your local health department for instructions on reporting and disposing of the body.

For more information call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)